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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,768	08/04/2006	Peter Brettschneider	2185-222	4324

6449 7590 04/27/2007  
ROTHWELL, FIGG, ERNST & MANBECK, P.C.  
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SUITE 800  
WASHINGTON, DC 20005

EXAMINER
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MULL, FRED H

ART UNIT	PAPER NUMBER
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3662

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/27/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/27/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/551,768	BRETTSCHEIDER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Fred H. Mull	3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because:

Erasures, alterations, and/or overwritings are present. See 37 CFR 1.84(e).

Copy machine marks are present. See 37 CFR 1.84(e).

Lines, numbers, and/or letters are not uniformly thick and/or well defined. See 37 CFR 1.84(l).

Solid black shading is not permitted. See 37 CFR 1.84(m).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

2. The disclosure is objected to because of the following informalities:

In ¶34, line 2, "reference line 7" should be --reference line 6--.

Appropriate correction is required.

***Claim Objections***

3. Claim(s) 1 and 5 is/are objected to under 37 CFR 1.75(i). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should begin on a new line and be preceded with a line indentation. Plural indentations may be necessary to further segregate subcombinations or related steps. See MPEP §608.01(m).

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1 and 5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The disclosure fails to describe the position data being corrected, as is claimed in the final line of each claim. The disclosure further fails to describe how the correction is accomplished.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Eschenbach.

In regard to claims 1 and 5, Eschenbach discloses:

at least one transmitter (24, Fig. 1) operating in an ultrawide band (UWB) spectrum (32; col. 12, lines 57-61),

at least one transmit/receive device (18) operating in the ultrawide band (UWB) spectrum (32, 36; col. 12, lines 57-61), and

a receiver (52) operating in the ultrawide band (UWB) spectrum are used (34, 36; col. 12, lines 57-61),

the transmitter being arranged stationary in the monitored area during the operation (col. 15, lines 35-36), where the fire engine carrying transmitter 24 stops in the monitoring area prior to when the firefighter wearing transmit/receive device 18 leaves the fire engine,

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the transmit/receive device being disposed on the person to be located and the receiver being arranged on a monitoring processor located outside the monitored area and connected thereto,

the transmitter and the transmit/receive device additionally operating based on a LORAN-C positioning system (col. 9, lines 61-64; col. 11, lines 40-55), where transmitter 24 determines its position using LORAN-C and provides that position to the transmit/receiver device 18 when they are co-located, this position then updated using INS 20, so that the transmit/receive device is operating based on the LORAN-C position, and

position data determined by the LORAN-C system being combined using ultrawide band technology and corrected (col. 13, lines 20-30).

In regard to claims 2 and 6, Eschenbach further discloses that there may be at least one other fire engine provided in the monitored area (col. 15, line 39).

In regard to claims 3 and 7, the ground on various sides of a building frequently are at different elevations, such that fire engines on different sides of the building would not be in the same plane.

In regard to claims 4 and 8-12, the monitored area would be inside the burning building, and the fire hydrant with a no-parking area in front is a prominent location of a building. Particularly, a large building that would likely draw multiple fire engines would have a fire hydrant in front of it.

6. The examiner also finds the following reference(s) relevant:

IDS document Fontana, which teaches UWB transmitters and a UWB receiver/processor at the object to be tracked (Fig. 1).

IDS document Richards (US 6,300,903 B1), which teaches embodiments with UWB transmitters and a UWB receiver at the object to be tracked, and embodiments with UWB receivers and a UWB transmitter at the object to be tracked (Figs. 10-15).

IDS document Cravotta, which teaches using UWB for position because it can more easily penetrate walls than a narrowband frequency transmitter (p. 52, 1<sup>st</sup> ¶).

Richards (US 6,495,904 B2), which teaches UWB transmitters, a UWB receiver/processor at the object to be tracked, a receiver outside of the monitored area (Fig. 11), and the use of LORAN (col. 18, lines 59-62).

Santhoff, which teaches a UWB transmitter and a UWB receiver at the object to be tracked (Fig. 1).

Neumark, which teaches a UWB transmitter/receivers at the object to be tracked, and a UWB transmitter/receivers to page the object (Fig. 1).

Applicant is encouraged to consider these documents in formulating their response (if one is required) to this action, in order to expedite prosecution of this application.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred H. Mull whose telephone number is 571-272-6975. The examiner can normally be reached on Monday through Friday from approximately 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fred H. Mull  
Examiner  
Art Unit 3662

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